UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

August 4, 2021

Mr. Steven Snider
Site Vice President
Duke Energy Carolinas, LLC
7800 Rochester Highway
Seneca, SC 29672-0752

SUBJECT: OCONEE NUCLEAR STATION – INTEGRATED INSPECTION REPORT 05000269/2021002 AND 05000270/2021002 AND 05000287/2021002

Dear Mr. Snider:

On June 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Oconee Nuclear Station. On July 27, 2021, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement; and the NRC Resident Inspector at Oconee Nuclear Station.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; and the NRC Resident Inspector at Oconee Nuclear Station.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

***/RA/***

Eric J. Stamm, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Docket Nos. 05000269 and 05000270 and 05000287
License Nos. DPR-38 and DPR-47 and DPR-55

Enclosure:
As stated

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SUBJECT: OCONEE NUCLEAR STATION – INTEGRATED INSPECTION REPORT 05000269/2021002 AND 05000270/2021002 AND 05000287/2021002 DATED August 4, 2021

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| X SUNSI Review | | X Non-Sensitive<br>☐ Sensitive | | X Publicly Available<br>☐ Non-Publicly Available | |
| OFFICE | RIIDRP | RIIDRP | RIIDRP | RIIDRP | RIIDRP |
| NAME | J.Nadel | A.Ruh | S.Bussey | R.Taylor | E.Stamm |
| DATE | 07/22/2021 | 08/04/2021 | 08/03/2021 | 08/02/2021 | 08/04/2021 |

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**U.S. NUCLEAR REGULATORY COMMISSION**
**Inspection Report**

| | |
|---|---|
| Docket Numbers: | 05000269, 05000270, and 05000287 |
| License Numbers: | DPR-38, DPR-47 and DPR-55 |
| Report Numbers: | 05000269/2021002, 05000270/2021002 and 05000287/2021002 |
| Enterprise Identifier: | I-2021-002-0023 |
| Licensee: | Duke Energy Carolinas, LLC |
| Facility: | Oconee Nuclear Station |
| Location: | Seneca, South Carolina |
| Inspection Dates: | April 01, 2021 to June 30, 2021 |
| Inspectors: | J. Nadel, Senior Resident Inspector<br>A. Ruh, Resident Inspector<br>S. Bussey, Sr. Reactor Technology Instructor<br>C. Fontana, Emergency Preparedness Inspector<br>S. Sanchez, Senior Emergency Preparedness Inspector<br>J. Walker, Emergency Response Inspector |
| Approved By: | Eric J. Stamm, Chief<br>Reactor Projects Branch 1<br>Division of Reactor Projects |

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Oconee Nuclear Station, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information.

## List of Findings and Violations

| Failure to Log Technical Specification Applicability | | | |
|---|---|---|---|
| Cornerstone | Significance | Cross-Cutting Aspect | Report Section |
| Mitigating Systems | Green<br>NCV 05000287/2021002-01<br>Open | [P.2] - Evaluation | 71152 |
| The inspectors identified a Green finding and associated Non-cited Violation (NCV) of technical specification (TS) 5.4.1.a, "Procedures," when the licensee failed to make operator narrative log entries for the entry and exit from TS limiting condition for operation (LCO) 3.7.16, Control Room Air Conditioning Systems (CRACS), during maintenance affecting the single active failure protection design basis of the Unit 3 CRACS. | | | |

## Additional Tracking Items

None.

## PLANT STATUS

Unit 1 operated at or near 100 percent rated thermal power (RTP) for the entire inspection period.

Unit 2 operated at or near 100 percent RTP for the entire inspection period.

Unit 3 operated at or near 100 percent RTP for the entire inspection period.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their onsite activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; observed risk significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

## REACTOR SAFETY

71111.01 - Adverse Weather Protection

External Flooding Sample (IP Section 03.03) (1 Sample)

(1) The inspectors evaluated flood protection barriers, mitigation plans, procedures, and equipment are consistent with the licensee's design requirements and risk analysis assumptions for coping with external flooding.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

(1) Standby shutdown facility on April 2, 2021
(2) Keowee hydroelectric units on April 6, 2021
(3) Emergency siphon system for Units 1, 2, and 3 on May 5, 2021, following system restoration due to replacement of 2ESV-2 float valve

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

(1) Fire zone 89: Unit 3 equipment room on April 22, 2021
(2) Fire zone 85: Unit 1 auxiliary building 200 level hallway on May 13, 2021
(3) Fire zone 112: Unit 3 control room on May 13, 2021
(4) Fire zone 105: Unit 2 cable room on June 1, 2021
(5) Fire zone 19: Unit 1 main feedwater pump area on June 10, 2021

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

(1) The inspectors observed and evaluated licensed operator performance in the Control Room during a Unit 3 condensate booster pump swap and reactor coolant system dilution on April 16, 2021, and a Unit 2 reactor power increase from 99.6% to 100% on April 19, 2021.

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

(1) The inspectors observed and evaluated team skill exercises on April 13, 2021, with the following scenarios: 1) Reactor coolant pump seal injection leak, loss of main feedwater with anticipated transient without scram and main turbine failing to trip; 2) Loss of component cooling water at 100% power; 3) Degraded grid condition.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

(1) High pressure service water system review
(2) Nuclear Condition Report (NCR) 2386700, Essential Siphon Vacuum Valve 2ESV-2 Failure on March 19, 2021

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

(1) Unit 1, 2, and 3 elevated Green risk on April 13, 2021, due to planned maintenance on elevated storage water tank, 'C' low pressure service water pump, and Keowee hydroelectric Unit 1 overhead emergency power path
(2) Unit 1, 2, and 3 elevated Green risk on April 26, 2021, due to planned maintenance that drained the elevated water storage tank and replacement of 2ESV-2, emergency siphon float valve
(3) Unit 1, 2, and 3 Yellow risk on May 20-25, 2021, due to safe shutdown facility (SSF) auxiliary service water pump inoperability caused by high vibrations during planned testing
(4) Unit 1, 2, and 3 elevated Green risk on June 15, 2021, due to SSF maintenance

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (7 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

(1) NCR 2376473, non-conservative inservice test and motor operated valve stroke times for 1,2,3HP-26 & 27
(2) NCR 2378192, gas void identified at 1LP-208 measuring 0.0278 cubic feet
(3) NCR 2371900, both Unit 3 control room air handling units powered from the 3XT motor control center
(4) NCR 2383431, flood penetration 1-AB-X-07 in auxiliary building corridor found with missing seal foam in places
(5) NCR 2386632, non-conservative application of effective reactor building cooling unit (RBCU) tube coil length in calculations
(6) NCR 2381156, 3LP-2 stroke time shorter than design basis document minimum requirement
(7) NCR 2387741, High differential flow recorded during PT/1/A/0600/013, 1B motor driven emergency feedwater pump surveillance test

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

(1) Engineering Change (EC) 110008, supply pump and miscellaneous equipment for alternate reactor building cooling

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the following post-maintenance test activities to verify system operability and functionality:

(1) PT/2/A/0261/010, Essential Siphon Vacuum Test, on May 1, 2021, following replacement of 2ESV-2 (ESV Float Valve)
(2) PT/0/A/0250/005, High Pressure Service Water Pump Functional Test, following restoration of elevated water storage tank, on May 4, 2021
(3) PT/0/A/0400/005, Safe Shutdown Facility Auxiliary Service Water (ASW) Pump Test, on May 26, 2021, following replacement of the ASW pump motor due to high vibrations
(4) PT/0/A/0160/006, Reactor Building Cooling Units Performance Test, on June 30, 2021, following replacement of 3C RBCU air outlet temperature sensor

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (2 Samples)

(1) Keowee hydroelectric unit 2 testing per PT/2/A/2200/001, PT/2/A/2200/011, and PT/2/A/2200/022, on April 12, 2021
(2) PT/1/A/0203/012 HPI/LPI/RBS Venting, on April 13, 14, and 28, 2021

Inservice Testing (IP Section 03.01) (1 Sample)

(1) PT/1/A/0600/013, 1B Motor Driven Emergency Feedwater Pump Test, work order (WO) 20447219

FLEX Testing (IP Section 03.02) (1 Sample)

(1) 500kW diesel generator testing, WO 20447405-02

71114.02 - Alert and Notification System Testing

Inspection Review (IP Section 02.01-02.04) (1 Sample)

(1) The inspectors evaluated the maintenance and testing of the alert and notification system during the week of June 7, 2021.

71114.03 - Emergency Response Organization Staffing and Augmentation System

Inspection Review (IP Section 02.01-02.02) (1 Sample)

(1) The inspectors evaluated the readiness of the Emergency Response Organization during the week of June 7, 2021.

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

(1) The inspectors evaluated submitted Emergency Action Level, Emergency Plan, and Emergency Plan Implementing Procedure changes during the week of June 7, 2021. This evaluation does not constitute NRC approval.

71114.05 - Maintenance of Emergency Preparedness

Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

(1) The inspectors evaluated the maintenance of the emergency preparedness program during the week of June 7, 2021.

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

(1) Emergency preparedness training augmentation and turnover drill E2021-01, on May 9, 2021

**OTHER ACTIVITIES – BASELINE**

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS05: Safety System Functional Failures (SSFFs) Sample (IP Section 02.04) (3 Samples)

(1) Unit 1 (April 1, 2020 through March 31, 2021)
(2) Unit 2 (April 1, 2020 through March 31, 2021)
(3) Unit 3 (April 1, 2020 through March 31, 2021)

MS08: Heat Removal Systems (IP Section 02.07) (3 Samples)

(1) Unit 1 (April 1, 2020 through March 31, 2021)
(2) Unit 2 (April 1, 2020 through March 31, 2021)
(3) Unit 3 (April 1, 2020 through March 31, 2021)

MS10: Cooling Water Support Systems (IP Section 02.09) (3 Samples)

(1) Unit 1 (April 1, 2020 through March 31, 2021)
(2) Unit 2 (April 1, 2020 through March 31, 2021)
(3) Unit 3 (April 1, 2020 through March 31, 2021)

BI02: RCS Leak Rate Sample (IP Section 02.11) (3 Samples)

(1) Unit 1 (April 1, 2020 through March 31, 2021)

(2) Unit 2 (April 1, 2020 through March 31, 2021)
(3) Unit 3 (April 1, 2020 through March 31, 2021)

EP01: Drill/Exercise Performance (DEP) Sample (IP Section 02.12) (1 Sample)

(1) Unit 1 (July 1, 2020, through March 31, 2021)
Unit 2 (July 1, 2020, through March 31, 2021)
Unit 3 (July 1, 2020, through March 31, 2021)

EP02: Emergency Response Organization (ERO) Drill Participation (IP Section 02.13) (1 Sample)

(1) Unit 1 (July 1, 2020, through March 31, 2021)
Unit 2 (July 1, 2020, through March 31, 2021)
Unit 3 (July 1, 2020, through March 31, 2021)

EP03: Alert And Notification System (ANS) Reliability Sample (IP Section 02.14) (1 Sample)

(1) Unit 1 (July 1, 2020, through March 31, 2021)
Unit 2 (July 1, 2020, through March 31, 2021)
Unit 3 (July 1, 2020, through March 31, 2021)

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

(1) NCRs 2379921, 2371900, 1904745, 1812194, 1712759, and 1764697 relating to evaluation of both Unit 3 control room air handling units being powered from the 3XT motor control center

**INSPECTION RESULTS**

<table>
<tr><td colspan="4">Failure to Log Technical Specification Applicability</td></tr>
<tr><td>Cornerstone</td><td>Significance</td><td>Cross-Cutting Aspect</td><td>Report Section</td></tr>
<tr><td>Mitigating Systems</td><td>Green<br>NCV 05000287/2021002-01<br>Open</td><td>[P.2] - Evaluation</td><td>71152</td></tr>
<tr><td colspan="4">The inspectors identified a Green finding and associated Non-cited Violation (NCV) of technical specification (TS) 5.4.1.a, "Procedures," when the licensee failed to make operator narrative log entries for the entry and exit from TS limiting condition for operation (LCO) 3.7.16, Control Room Air Conditioning Systems (CRACS), during maintenance affecting the single active failure protection design basis of the Unit 3 CRACS.</td></tr>
<tr><td colspan="4">Description: Section 9.4.1.1 of the Updated Final Safety Analysis Report describes the CRACS design as being redundant trains, designed "to ensure that no single failure of an active component within these systems will prevent proper control area environmental control." Manual action is credited "to realign systems, restart load shed equipment, or return</td></tr>
</table>

the systems to service for other reasons." For Unit 3 control room cooling, the two air handling units (AHUs) are both normally powered from the 3XT 600-volt motor control center (MCC) via the 3X4 load center (LC). During a design basis accident with loss of offsite power, the 3X4 LC is load shed and the 3XT MCC is automatically transferred to the non-load shed 3X6 LC. In the event the automatic transfer fails, manual action to restore power to the AHUs from 3X4 is accomplished by AP/3/A/1700/036, "Degraded Control Room Area Cooling," and AP/3/A/1700/011, "Recovery from Loss of Power." In the above manner, two sources of power are normally available for accident mitigation.

Inspectors identified that routine online maintenance affecting the normal alignment of these power sources was historically not being evaluated or tracked in operator narrative logs as affecting operability of the CRACS per technical specification (TS) 3.7.16. For example, on February 20, 2020, the 3X6 LC was removed from service for preventive maintenance. This maintenance left the CRACS vulnerable to a single active failure of the 3X4 LC power source to re-close following a load shed with no specific manual operator action that would restore cooling, contrary to the design basis previously described. This maintenance activity duration was approximately 20 hours while TS 3.7.16, condition A, has a required action time of 30 days when only one train remains operable. Since the maintenance duration did not exceed the required action time, the LCO was not violated. Licensee procedure AD-OP-ALL-0112, "Operations Log Keeping and Chart Recorders," required operators to track the TS LCO in the operator narrative logs, but no log entry was made.

Concerns with the AHUs sharing the 3XT MCC were previously identified in 2001, 2005, 2016, and 2021 by NCRs 1712759, 1764697, 1812194, and 2371900 respectively. Generally, these NCRs discussed the potential to lose all power to the 3XT MCC during breaker and switch operations supporting maintenance or post-maintenance testing. Past operating experience demonstrated that equipment problems can cause 3XT MCC power to lose power when transferring the power supply from 3X4 LC to 3X6 LC or vice versa. A loss of power during transfer causes a loss of CRACS function (both trains inoperable) and necessitates entry into TS LCO 3.0.3 and a potential plant shutdown. These NCRs specifically recognized there was reliance on one source of power during breaker PMs which created a vulnerability to lose both trains from a single failure. These evaluations were focused on avoiding single point vulnerabilities in terms of operational risk and missed the opportunity to identify that actual system operability per TS 3.7.16 was potentially impacted during the maintenance.

Corrective Actions: Narrative logs were updated, changes were made to OP/3/A/1107/014, "Removal and Restoration of 4160V Switchgear and 600V Load Centers," and operator training requests were initiated regarding TS 3.7.16.

Corrective Action References: 2379921

Performance Assessment:

Performance Deficiency: The inspectors determined that the failure to track applicable technical specification LCOs as required by section 5.1.1.9 and 5.1.3.3 of AD-OP-ALL-0112, was a performance deficiency. This requirement was not satisfied because operators failed to identify and track LCO 3.7.16 during maintenance affecting the single active failure protection design basis of the Unit 3 CRACS.

Screening: The inspectors determined the performance deficiency was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, this failure was indicative of a weakness with the licensee's

implementation of the design basis of the CRACS, resulting in misapplication of TS and could have led to missed TS required actions if the vulnerability remained unrecognized.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using exhibit 2, "Mitigating Systems Screening Questions," inspectors determined the finding was of very low safety significance (Green) because the performance deficiency was strictly an administrative requirement to track inoperable equipment and did not result in an actual degraded condition representing a loss of probabilistic risk assessment function of one train of a multi-train TS system for greater than its TS allowed outage time.

Cross-Cutting Aspect: P.2 - Evaluation: The organization thoroughly evaluates issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. In this case, on multiple occasions, the licensee identified CRACS single failure vulnerabilities in terms of plant operational risk but did not thoroughly evaluate the conditions relative to the system's design bases and TS operability.

Enforcement:

Violation: TS 5.4.1.a, "Procedures," required, in part, that written procedures be established, implemented, and maintained covering activities related to procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, 1978. Regulatory Guide 1.33, Section 1(h), "Administrative Procedures," required procedures addressing log entries, which was partially implemented by AD-OP-ALL-0112, Revision 0. AD-OP-ALL-0112, section 5.1.1.9 and 5.1.3.3, required, in part, that operators make log entries of entry and exit from TS LCOs. Contrary to the above, the licensee failed to make operator narrative log entries for the entry and exit from TS LCO 3.7.16, Control Room Air Conditioning Systems, condition "A" on February 20, 2020.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

## EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On July 27, 2021, the inspectors presented the integrated inspection results to Steven Snider and other members of the licensee staff.
- On June 11, 2021, the inspectors presented the Emergency Preparedness Program inspection results to Steven Snider and other members of the licensee staff.

**DOCUMENTS REVIEWED**

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|---|---|---|---|---|
| 71111.04 | Procedures | OP/0/A/1600/005 | SSF Normal Power | 46 |
| 71111.05 | Calculations | OSC-10816 | ONS TCCA “A” and “B” Area Basis for AD-EG-ALL-1520 | 005 |
| 71111.05 | Calculations | OSC-9314 | NFPA 805 Transition Risk-Informed, Performance-Based Fire Risk Evaluation | 006 |
| 71111.05 | Calculations | OSC-9375 | ONS Fire PRA – Fire Scenario Report | 009 |
| 71111.05 | Calculations | OSC-9659 | Oconee Nuclear Safety Capability Assessment for Units 1, 2 And 3 | 011 |
| 71111.05 | Drawings | O-0310-FZ-011 | Fire Protection Plan Fire Area & Fire Zone Boundaries Plan at EL. 796+6 &El. 797+6 | 2 |
| 71111.05 | Drawings | O-0310-FZ-013 | Auxiliary Building – Unit 2 Fire Protection Plan Fire Area & Fire Zone Boundaries Plan at EL 809+3 | 3 |
| 71111.05 | Drawings | O-0310-K-011 | Fire Protect Aux Building Unit 2 EL 809+3 | 16 |
| 71111.05 | Drawings | O-0310-K-09 | Auxiliary Building & Reactor Building – Unit 3 Fire Protection Plan & Fire Barrier, Flood, & Pressure Boundaries Plan at EL. 796+6 &El. 797+6 | 14 |
| 71111.05 | Drawings | O-0310-L-001 | Fire Protection Plan & Fire Barriers, Flood, & Pressure Boundaries Plan at EL 775+0 | 11 |
| 71111.05 | Drawings | O-0310-S2-015 | Unit 2 Cable Room Sprinkler System Plan | 1 |
| 71111.05 | Drawings | O-0939 | Electrical Equipment Layout Turbine Building Below El. 796’+6” Column Line 21 to 27 | 51 |
| 71111.05 | Fire Plans | CSD-ONS-FS-018 | Standard Operating Guide 18 Pre-Fire Plans | 0 |
| 71111.05 | Fire Plans | CSD-ONS-FS-020 | Standard Operating Guide 20 Key Equipment List by Fire Zone | 0 |
| 71111.05 | Fire Plans | CSD-ONS-PFP-1TB-0775 | Pre-Fore Plan for U1 Turbine Building Elevation 775 | 0 |
| 71111.05 | Fire Plans | CSD-ONS-PFP-3AB-0796 | Pre-Fire Plan for Auxiliary Building Elevation 796 | 000 |
| 71111.05 | Procedures | AD-EG-ALL-1520 | Transient Combustible Control | 14 |
| 71111.05 | Procedures | AD-EG-ALL-1540 | Fire Protection Nuclear Capability Assessment (NSCA) | 00 |
| 71111.05 | Procedures | AP/0/A/1700/025 | Standby Shutdown Facility Emergency Operating Procedure | 67 |
| 71111.11Q | Corrective Action | | 02378827 | |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|---|---|---|---|---|
| | Documents | | | |
| 71111.11Q | Miscellaneous | | Simulator Exercise Guide SAE-R290 | 00 |
| 71111.11Q | Procedures | AD-OP-ALL-0111 | Operations Communications | 4 |
| 71111.11Q | Procedures | AD-OP-ALL-1000 | Conduct of Operations | 17 |
| 71111.11Q | Procedures | AD-OP-ALL-1001 | Conduct of Abnormal Operations | 4 |
| 71111.11Q | Procedures | AD-OP-ONS-0002 | Oconee Specific Abnormal Operations Guidance | 003 |
| 71111.11Q | Procedures | AP/1/A/1700/002 | Excessive RCS Leakage | 017 |
| 71111.11Q | Procedures | AP/1/A/1700/014 | Loss of Normal HPI Makeup And/Or RCP Seal Injection | 022 |
| 71111.11Q | Procedures | AP/1/A/1700/020 | Loss of Component Cooling | 013 |
| 71111.11Q | Procedures | AP/1/A/1700/029 | Rapid Plant Shutdown | 014 |
| 71111.11Q | Procedures | AP/1/A/1700/034 | Degraded Grid | 014 |
| 71111.11Q | Procedures | AP/2/A/1700/001 | Unit Runback | 016 |
| 71111.11Q | Procedures | EP/1/A/1800/001 | U-1 EOP Immediate Manual Actions and Subsequent Actions | 03 |
| 71111.11Q | Procedures | OP/2/A/1104/004 | Operation at Power | 126 |
| 71111.11Q | Procedures | OP/2/A/1106/002 | Condensate and FDW System | 170 |
| 71111.11Q | Procedures | OP/2/A/1106/002 C | HWP and CBP Operation | 012 |
| 71111.11Q | Procedures | OP/2/A/6102/002 | Alarm Response Guide 2SA-02 | 033 |
| 71111.11Q | Procedures | OP/2/A/6102/008 | Alarm Response Guide 2SA-08 | 037 |
| 71111.11Q | Procedures | OP/3/A/1103/004 | Soluble Poison Control | 119 |
| 71111.11Q | Procedures | OP/3/A/1103/004 B | Purification IXs | 015 |
| 71111.11Q | Procedures | OP/3/A/1106/002 | Condensate and FDW System | 170 |
| 71111.11Q | Procedures | OP/3/A/1106/002 C | HWP and CBP Operation | 016 |
| 71111.11Q | Work Orders | | 20199467 | |
| 71111.12 | Calculations | OSC-7966 | EWST Inventory for Turbine Building Flood | 10 |
| 71111.12 | Corrective Action Documents | | 2336744, 2326989, 2342922, 2373981, 2374940, 2374947, 2381804, 2374947 | |
| 71111.12 | Drawings | OFD-124C-1.8 | Flow Diagram of High Pressure Service Water System (Radwaste Facility Portion) | 5 |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|---|---|---|---|---|
| 71111.12 | Work Orders | | 20418874, 20459011 | |
| 71111.13 | Corrective Action Documents | | 2386259 | |
| 71111.13 | Miscellaneous | | Clearance PRT-0-21-C LPSW PUOOS-0080 | |
| 71111.13 | Miscellaneous | | Clearance PRT-0-21-EWST OOS-0094(1) | |
| 71111.13 | Miscellaneous | | Clearance PRT-0-20-K1 OH OSS-0267 | |
| 71111.13 | Miscellaneous | | Phoenix Risk Assessment 21W15 | |
| 71111.13 | Procedures | AD-SY-ONS-0201 | Security Operations | 2 |
| 71111.13 | Procedures | PO-SY-ONS-0222 | Keowee Hydro Station Security | 27 |
| 71111.13 | Procedures | PO-SY-ONS-0423 | Post 23 | 0 |
| 71111.15 | Calculations | OSC-11343 | Evaluation of MOV Motors and ETAP Inputs | 4 |
| 71111.15 | Calculations | OSC-11581 | U1/2/3 Keowee EPS and 100kV APS Voltage Adequacy Analyses | 1 |
| 71111.15 | Calculations | OSC-11956 | Reactor Building Cooling Units Performance Test | 0 |
| 71111.15 | Calculations | OSC-6146 | Post-LOCA Reactor Building Cooling Unit Capacity | 3 |
| 71111.15 | Calculations | OSC-6560 | Acceptable Stroke Time for High Pressure Injection Throttle Valves HP26 and HP27 | 1 |
| 71111.15 | Calculations | OSC-7183 | Control Room Area Cooling System (CRACS) Single Failure Analysis | 8 |
| 71111.15 | Calculations | OSC-7608 | U1/2/3, AC Power System ETAP Model Base File | 15 |
| 71111.15 | Calculations | OSC-8064 | ROTSG Long-Term Containment Response Following a Large Break LOCA | 19 |
| 71111.15 | Corrective Action Documents | | 1787325 | |
| 71111.18 | Calculations | OSC-10744 | ONS RB Component Evaluations Under PSW Conceptual Design Event Scenarios | 6 |
| 71111.18 | Calculations | OSC-10785 | GOTHIC Containment Analysis Utilizing the PSW System | 4 |
| 71111.18 | Calculations | OSC-10821 | Evaluation of RBCUs for Heat Removal During a PSW Event | 3 |
| 71111.18 | Calculations | OSC-9855 | LPI Drop Line Pressure Transient Analyses | 0 |
| 71111.18 | Calculations | O-0423-AA | Alternate RBCU Cooling RBCU Hale Pump and Hose Layout | 1 |

| Inspection Procedure | Type | Designation | Description or Title | Revision or Date |
|---|---|---|---|---|
| 71111.18 | Drawings | OFD-124B-1.2 | Flow Diagram of LPSW System RBCUs | 36 |
| 71111.18 | Drawings | AM/0/A/3007/066 | Abnormal Procedure for Installation and Removal of RBCU Hale Pumps and Hoses | 4 |
| 71111.18 | Procedures | AP/0/A/1700/051 | Alternate Reactor Building Cooling | 3 |
| 71111.18 | Procedures | | Instrument Certification for OCPRF28810 | April 29, 2020 |
| 71111.19 | Miscellaneous | ONTC-1-124C-0001-001 | HPSW System Test Acceptance Criteria | 4 |
| 71111.19 | Miscellaneous | OSC-5945 | HPSW Pump and Fire Protection Flow Test Acceptance Criteria | 8 |
| 71111.19 | Miscellaneous | | 20474125 | |
| 71111.19 | Work Orders | OSC-2515 | Verification of Emergency Feedwater System Flow Utilizing MFW System Bypass | 25 |
| 71111.22 | Calculations | | 02378213 | |
| 71111.22 | Corrective Action Documents | KFD-101A-2.1 | Flow Diagram of Turbine Guide Bearing Oil System | 011 |
| 71111.22 | Drawings | ONTC-1-121D-0001-001 | Test Acceptance Criteria for Motor Driven EFW Pumps 1A & 1B | 6 |
| 71111.22 | Drawings | CSD-EG-ONS-1619.1000 | Diverse and Flexible Coping Strategies (FLEX) Program Document – Oconee Nuclear Station | 005 |
| 71111.22 | Miscellaneous | OM-201-3538.001 | Kubota GL 11000 Diesel Generator (10KW Output) | 000 |
| 71111.22 | Miscellaneous | OM-201-3543.001 | I/B – Instruction Manual for Caterpillar C15 Generator Set | 003 |
| 71111.22 | Miscellaneous | OM-201-3544.001 | I/B – Instruction Manual for Baldor DG6E Diesel Power Products Generator | 000 |
| 71111.22 | Miscellaneous | OSS-0254.00-00-1041 | Design Basis Specification for the Keowee Turbine Generator Cooling Water (WL) System | 012 |
| 71111.22 | Miscellaneous | OSS-0254.00-00-1043 | (MECH) Design Basis Specification for the Keowee Turbine Guide Bearing Oil (GBO) System | 013 |
| 71111.22 | Miscellaneous | PT/2/A/2200/001 | KHU-2 Bi-Weekly Surveillance | 027 |
| 71111.22 | Procedures | PT/2/A/2200/011 | KHU-2 Turbine Guide Bearing Oil System Surveillance | 014 |
| 71111.22 | Procedures | PT/2/A/2200/022 | KHU-2 Control Valve IST Surveillance | 011 |
| 71111.22 | Procedures | | 20447397, 20455745, 20460499, 20447405 | |
| 71111.22 | Work Orders | | MSPI Basis Document | 26 |
| 71151 | Procedures | | 440279, 2371900, 1904745, 1812194, 1712759, 1764697 | |

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| 71152 | Corrective Action Documents | OM 2303-16 | Elementary Schematic and Dev. Int. Diagram | 1 |
| 71152 | Drawings | OM 2303-17 | Elementary Schematic and Dev. Int. Diagram | 1 |
| 71152 | Drawings | OM 2303-18 | Elementary Schematic and Dev. Int. Diagram | 1 |
| 71152 | Drawings | | Clearance OPS-3-19-EL-3X6 LC PM-1125 | |
| 71152 | Miscellaneous | | Operator Narrative Logs dated February 20, 2020 | |
| 71152 | Miscellaneous | PT/3/A/0610/001 L | Load Shed Channel Verification | 23 |
| 71152 | Procedures | | 20324132 | |